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APPENDIX OF CLAIMS

1(Amended). A document of value for example a paper of value, ID card or the like, comprising at least one authenticity feature in the form of a luminescent substance, the luminescent substance having particles comprising a dye-laden molecular sieve whose structure forms an optical resonator in which at least one dye can be excited to show stimulated emission, the dye being incorporated in the cavities of the molecular sieve or located in or on the internal and external surfaces of the molecular sieve and wherein the transition to stimulated emission is accompanied by a detectable change in the luminescent properties of the dye.

2(Amended). The document of value according to claim 1, wherein the luminescent substance comprises different particles comprising different dye-laden molecular sieves.

3(Amended). The document of value according to claim 2, wherein the molecular sieve includes a channel structure, such as classes of aluminophosphates.

4(Amended). The document of value according to claim 1, wherein the dye molecules comprise a class of laser dyes.

5(Amended). The document of value according to claim 1, wherein the spectral properties of the dye have been adjusted by selection of the end groups.

6(Amended). The document of value according to claim 1, wherein the molecular sieve includes different excitable dyes.

7(Amended). The document of value according to claim 1, wherein the document of value has a further authenticity feature.

8(Amended). The document of value according to claim 7, wherein the second authenticity feature comprises a further luminescent material which preferably has the same body color as the luminescent substance.

9(Amended). The document of value according to claim 1, wherein the luminescent substance is present in the volume of the document of value.

10(Amended). The document of value according to claim 1, wherein the luminescent substance is admixed to a printing ink.

11(Amended). The document of value according to claim 10, wherein the printing ink is applied in the form of a coding, for example a bar code.

12(Amended). The document of value according to claim 10, wherein the printing ink with the luminescent substance is surrounded by a second printing ink with a further luminescent substance.

13(Amended). The document of value according to claim 10, wherein the printing ink is applied at least in certain areas to the document of value or to a carrier connected with the document of value.

14(Amended). The document of value according to claim 1, wherein the luminescent substance is disposed in or on a security element connected with the document of value.

15(Amended). A security element comprising at least one authenticity feature in the form of a luminescent substance, the luminescent substance having particles comprising a dye-laden molecular sieve whose structure forms an optical resonator in which at least one dye can be excited to show stimulated emission, the dye being

incorporated in the cavities of the molecular sieve or located in or on the internal and external surfaces of the molecular sieve, and wherein the transition to stimulated emission is accompanied by a detectable change in the luminescent properties of the dye.

16(Amended). The security element according to claim 15, wherein the security element includes at least one carrier material in the volume or on the surface of which the luminescent substance is disposed.

17(Amended). The security element according to claim 15, wherein the security element has the form selected from the group consisting of a strip, band and a label.

18(Amended). A method for marking a product comprising:
providing a product with a luminescent substance having particles comprising a dye-laden molecular sieve whose structure forms an optical resonator in which at least one dye can be excited to show stimulated emission;
incorporating the dye in the cavities of the molecular sieve or located in or on the internal and external surfaces of the molecular sieve, and
selecting the dye such that the transition to stimulated emission is accompanied by a detectable change in the luminescent properties of the dye.

19(Amended). A method for checking a luminescent substance having particles comprising a dye-laden molecular sieve whose structure forms an optical resonator, comprising the steps:
selecting at least one dye that can be excited to show stimulated emission;
incorporating the dye in the cavities of the molecular sieve or located in or on the internal and external surfaces of the molecular sieve;

selecting the dye such that the transition to stimulated emission is accompanied by a detectable change in the luminescent properties of the dye; and using the line narrowing and line shift and/or the threshold behavior and/or the shortening of the lifetime as an authenticity feature.

20(Amended). A process for marking products comprising using dye-laden molecular sieves showing stimulated luminescence without an external resonator for marking the products.

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